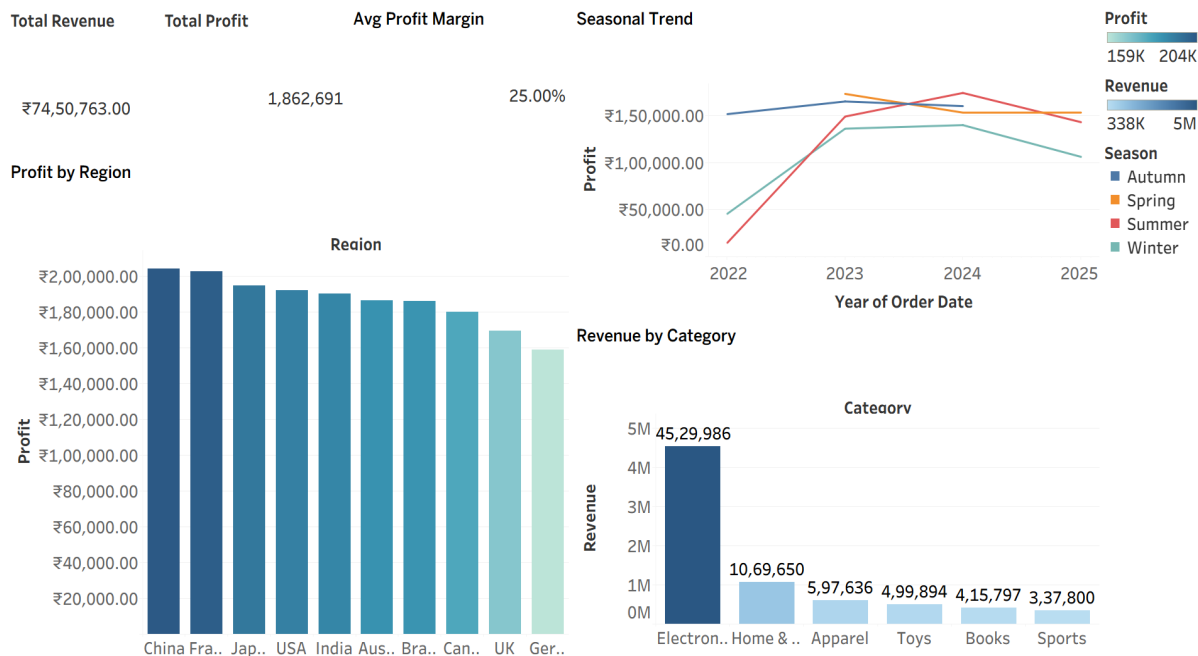# Retail Sales & Profitability Analysis Report

Student Name: Krishna Biliye
Dataset: eCommerce Retail Transactions (10,000 Records)
Tools Used: Tableau, SQLite, Python (Pandas), Excel

Overview

This project analyzes 10,000 online retail transactions to evaluate sales performance, profit distribution, and seasonal trends. The goal is to identify high-performing categories, profitable regions, and periods of high and low demand. The analysis leverages Tableau for visualization and SQL/Python for data preparation.

Profitability by Region

China and France lead in profitability, each contributing over ■2,00,000 in profits. Other strong performers include Japan, USA, and India. Germany and UK show lower profits, suggesting potential inefficiencies.

Revenue by Category

Electronics dominate sales with ■45,29,986 revenue (≈61% of total). Home & Kitchen, Apparel, and Toys follow as steady mid-range segments, while Sports and Books show lower revenue.

Seasonal Trends

Autumn and Spring show the highest profitability, peaking around 2023–2024. Winter shows a decline in 2025, possibly due to demand saturation.

Key Findings

• Consistent 25% profit margin indicates strong operational efficiency.
• Electronics dominate sales; diversification recommended.
• Asia and Western Europe outperform other regions.
• Focus marketing on Spring and Autumn for peak results.

Recommendations

1. Optimize inventory for top-performing categories.
2. Adjust pricing for low-margin items.
3. Expand marketing in high-profit regions.
4. Align promotions with peak seasonal trends.
5. Add cost and ROI data for deeper insight.

Conclusion

The analysis demonstrates stable growth and profitability between 2022–2025. The company's core strength lies in Electronics and Asian market success. Data-driven inventory and marketing decisions will further enhance long-term profitability.